

1.	Title of the course	Reaction Engineering Laboratory
2.	Course number	CH3292
3.	Status of the course	Core
4.	Structure of credits	0-0-3-2
5.	Offered to	UG
6.	New course/modification to	New course
7.	To be offered by	Department of Chemical Engineering
8.	To take effect from	January 2022
9.	Prerequisite	Nil
10.	Whether approved by the Department	Yes
11.	<b>Course Objective(s):</b> To perform experiments for applying the principles of chemical kinetics, reaction engineering and catalysis.	
12.	<b>Course Content:</b> Kinetics of liquid phase reaction; Residence time distribution studies in tubular flow reactor, single tank, series of tanks, and packed bed reactor; Kinetics of heterogeneous reactions.	
13.	<b>Textbook(s):</b> 1. Fogler S H, <i>Elements of Chemical Reaction Engineering</i> , 4th Edition, Prentice Hall India (2015). 2. Levenspiel O, <i>Chemical Reaction Engineering</i> , 3rd Edition, Wiley India (1999).	
14.	<b>Reference(s):</b> 1. Davis M E and Davis R J, <i>Fundamentals of Chemical Reaction Engineering</i> , 1st Edition, McGraw Hill (2003). 2. Doraiswamy L K and Uner D, <i>Chemical Reaction Engineering: Beyond the Fundamentals</i> , 1st Edition, CRC Press (2013). 3. Froment G F and Bischoff K B, <i>Chemical Reactor Analysis and Design</i> , 2nd Edition, John Wiley & Sons (1990). 4. Schmidt L D, <i>The Engineering of Chemical Reactions</i> , 2nd Edition, Oxford University Press (2005).	